



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

A CASE REPORT OF HYPEREMESIS GRAVIDARUM RESULTING IN WERNICKE'S ENCEPHALOPATHY

KEY WORDS:

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ABSTRACT

Vomiting and nausea is common in pregnancy, especially in the first trimester. Hyperemesis Gravidarum is defined as vomiting and nausea occurring the first 20 weeks of pregnancy with severity so as to require admission to hospital and associated with dehydration and Five percent weight loss of the pre pregnancy weight, ketosis, alkalosis from hydrochloride acid, and hypokalemia. Hyperemesis gravidarum is a diagnosis of exclusion and other causes should be ruled out. Wernicke's encephalopathy is a serious neurological deficit due to severe thiamine deficiency and if not corrected can lead to Korsakoff's syndrome. Here is a case of a 25 yr old primigravida at 14 weeks and 4 days with hyperemesis gravidarum presenting with signs of Wernicke's encephalopathy.

INTRODUCTION

Wernicke encephalopathy, is a neurological disease characterised by three main clinical symptoms: confusion, the inability to coordinate voluntary movement (ataxia) and eye (ocular) abnormalities. Wernicke syndrome is considered the acute phase of Wernicke Korsakoff syndrome and if left untreated, transitions to the chronic irreversible Korsakoff syndrome occur. When these two disorders occur together, the term Wernicke-Korsakoff syndrome is used. Usually cases are associated with chronic consumption of alcohol but can occur in individuals who have malnutrition, eating disorders , hyperemesis or other conditions that cause a deficiency in thiamine.

CASE REPORT

A 25 Year old Primigravida with 14 weeks 4 days gestational age came with complaints of multiple episodes of vomiting and loss of appetite for the last three weeks. Patient was brought with decreased levels of consciousness and generalised weakness for a day. She also had history of weight loss.

Patient had complaints of shortness of breath, headache. On examination, the patient was conscious, irritable, afebrile and dehydrated. Vitals – GC- poor, pallor, bilateral pedal oedema absent, PR- 128/min, BP-90/60 mm Hg, GRBS- 134mg/dl.

Cardiovascular and respiratory system – normal.

Per abdomen – uterus – 14 weeks size, relaxed.

P/V – cervix uneffaced and os admitting tip of finger.

CNS – GCS-10/15(E2V4M4), Power- (U/L- 3/5, 3/5; L/L – 1/5,1/5). Deep tendon reflexes decreased. Bilateral Plantar reflex mute, she had bilateral nystagmus.

Serum biochemical values were deranged.

(serum potassium – 2.5 mEq/L, serum sodium- 132 mEq/L, serum Chloride- 100 mEq/L)

Antenatal scan showed intrauterine foetal demise.

Neuro Physician opinion taken in view of headache, generalised weakness. MRI done.

MRI showed bilaterally symmetrical signal intensity changes involving mammillary bodies, dorso-medial thalamus, tectal plate, peri aqueductal area and around the third ventricle systemic metabolic disease likely Wernicke's Encephalopathy.

Physician review taken and patient shifted to ICU. Inj KCL – 40

mEq/L in 500 ml NS given over 4 hours for 2 hours. She was also started on Inj. Thiamine 100mg IV once a day for 5 days. Ophthalmic examination showed normal fundus. No evidence of papilledema.

As scan was suggestive of intrauterine foetal demise, medical termination of pregnancy done.

Patient condition improved remarkably after thiamine infusion and electrolyte correction.

DISCUSSION

Wernicke's encephalopathy is caused by thiamine deficiency. Thiamine is an important coenzyme in several biochemical pathways involving the brain. It is common in alcoholics, but it also occurs in malnutrition due to hyperemesis, starvation, renal replacement therapy, gastric surgery, etc. Diagnosis may be difficult due to nonspecific presentation clinically. Patient might complain of irritability, fatigue, headache, ocular signs , confusion. Serum thiamine does not reflect the total body thiamine status. MRI of the brain can help in giving an initial diagnosis of wernicke's encephalopathy by typical involvement of medial aspect of thalami, mammillary bodies, peri aqueductal lesions and mesencephalic tegmentum on T2 weighted images and fluid attenuated inversion recovery images.

Patients should receive immediate treatment with thiamine intravenously (500mg in 100 ml NS) thrice a day for two to three days and then after assessing the response, 250 mg per day until signs reverse. Oral supplements should be carried out later.

Delayed treatment can result in severe neurological sequale and affect the fetus by causing Intrauterine growth restriction or miscarriage.

It is now a rarely encountered diagnosis but it shouldn't be missed out.